

UNITED STATES PATENT APPLICATION

INVENTION : Truck Bed Liner With Integrated Truck Storage Compartmentalization

INVENTOR : Brian Haack

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VII. CLAIMS

What is claimed is:

Sub 537
1. A storage compartment in a truck bed liner comprising a hingedly affixed divider panel that forms a vertical wall when in a raised position and a hingedly affixed enclosure panel that forms a horizontal cover member when in a raised position, the divider panel and the enclosure panel positioned such that when in a raised position form an enclosed compartment.

2. The storage compartment of Claim 1 further including a divider panel securing means for positioning and securing the divider panel.

3. The storage compartment of Claim 1 further including an enclosure panel securing means for positioning and securing the enclosure panel.

4. The storage compartment of Claim 1 wherein the divider panel is located in the bottom of the truck bed liner.

5. The storage compartment of Claim 1 wherein the enclosure panel is located in the back wall of the truck bed liner.

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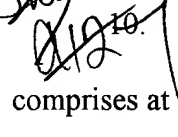
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6. The storage compartment of Claim 1 wherein the enclosure panel is located in the front wall of the truck bed liner.

7. The storage compartment of Claim 1 wherein the enclosure panel is located in the Side wall of the truck bed liner.

8. The storage compartment of Claim 1 wherein the divider panel and the enclosure panel each have three free edges and a fourth edge comprising a hinge means.

9. The storage compartment of Claim 8 wherein the hinge means is a living hinge.

 10. The storage compartment of Claim 2 wherein the divider panel securing means comprises at least two protrusions extending outwardly from each Side wall of the liner at a predetermined point in the side walls such that they maintain the divider panel in a 90 angle with respect to the bottom when the divider panel is in a raised position, the protrusions being spaced apart from one another along the horizontal axis a sufficient distance such that the divider panel can be positioned between them.

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11. The liner of Claim 3 wherein the enclosure panel securing means comprises at least two horizontal protrusions extending outwardly from each of the two side walls of the liner at a predetermined point in the Side wall, the horizontal protrusions being spaced apart from one another a sufficient distance to form a closure channel to receive and secure the enclosure panel between the horizontal protrusions.

12. The liner of Claim 1 further comprising a base panel, the base panel having a first side and a second side, the enclosure panel being releasably affixed to the first side of the base panel when the enclosure panel is not within the enclosure securing means.

13. The liner of Claim 1 wherein the enclosure panel is releasably affixed to the first side of the base panel by a hook and loop type of fastener.

14. A storage compartment for a truck bed liner comprising:
an integrated divider panel having at least two living hinges located at predetermined locations on the divider panel, the living hinges enabling the divider panel to be raised into a vertical position at one of the at least two living hinges and horizontal position at the second of the at least two living hinges; and
panel securing means, whereby, the divider panel can be positioned and secured to form a trunk storage compartment.

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15. A storage compartment in a vehicle liner comprising a hingedly affixed divider panel that forms a vertical wall when in a raised position and a hingedly affixed enclosure panel that forms a horizontal cover member when in a raised position, the divider panel and the enclosure panel positioned such that when in a raised position form an enclosed compartment.

16. The storage compartment of Claim 15 further including a divider panel securing means for positioning and securing the divider panel.

17. The truck bed liner of Claim 15 further including an enclosure panel securing means for positioning and securing the enclosure panel.

18. The storage compartment of Claim 15 wherein the divider panel is located in the bottom of the vehicle liner.

19. The storage compartment of Claim 15 wherein the enclosure panel is located in the back wall of the vehicle liner.

20. The storage compartment of Claim 15 wherein the enclosure panel is located in the front wall of the vehicle liner.

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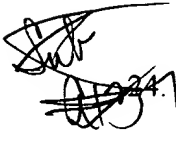
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21. The storage compartment of Claim 15 wherein the enclosure panel is located in the Side wall of the vehicle liner.

22. The storage compartment of Claim 15 wherein the divider panel and the enclosure panel each have three free edges and a fourth edge comprising a hinge means.

23. The vehicle liner of Claim 22 wherein the hinge means is a living hinge.

 24. The storage compartment of Claim 16 wherein the divider panel securing means comprises at least two protrusions extending outwardly from each Side wall of the liner at a predetermined point in the side walls such that they maintain the divider panel in a 90 angle with respect to the bottom when the divider panel is in a raised position, the protrusions being spaced apart from one another along the horizontal axis a sufficient distance such that the divider panel can be positioned between them.

25. The liner of Claim 17 wherein the enclosure panel securing means comprises at least two horizontal protrusions extending outwardly from each of the two side walls of the liner at a predetermined point in the Side wall, the horizontal protrusions being spaced apart from one another a sufficient distance to form a closure channel to receive and secure the enclosure panel between the horizontal protrusions.

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26. The liner of Claim 15 further comprising a base panel, the base panel having a first side and a second side, the enclosure panel being releasably affixed to the first side of the base panel when the enclosure panel is not within the enclosure securing means.

27. The liner of Claim 15 wherein the enclosure panel is releasably affixed to the first side of the base panel by a hook and loop type of fastener.

28. An enclosed storage compartment for a vehicle having a storage compartment comprising a hingedly affixed divider panel that forms a vertical wall when in a raised position and an enclosure panel that forms a horizontal cover member when in a raised position, the divider panel and enclosure panel positioned adjacent to one another and secured into place forming an enclosed compartment.

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29. An enclosed storage compartment for a vehicle having a storage compartment comprising a divider panel having at least two living hinges located at predetermined locations on the divider panel, the living hinges enabling the divider panel to be raised into a vertical position at one of the at least two living hinges and horizontal position at the second of the at least two living hinges; and

panel securing means, whereby, the divider panel can be positioned and secured to form a trunk storage compartment.

 30. A truck bed of the type made of materials capable of having formed members, the improvement comprising:

a divider panel and further comprising at least two living hinges located at predetermined locations on the divider panel, the living hinges enabling the divider panel to be raised into a vertical position at one of the at least two living hinges and horizontal position at the second of the at least two living hinges; and

panel securing means, whereby, the divider panel can be positioned and secured to form a trunk storage compartment with the bottom and an adjacent Side wall.

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31. A storage compartment in a truck bed comprising a hingedly affixed divider panel that forms a vertical wall when in a raised position and a hingedly affixed enclosure panel that forms a horizontal cover member when in a raised position, the divider panel and the enclosure panel positioned such that when in a raised position form an enclosed compartment.

32. The storage compartment of Claim 31 further including a divider panel securing means for positioning and securing the divider panel.

33. The storage compartment of Claim 31 further including an enclosure panel securing means for positioning and securing the enclosure panel.

34. The storage compartment of Claim 31 wherein the divider panel is located in the bottom of the truck bed.

35. The storage compartment of Claim 31 wherein the enclosure panel is located in the back wall of the truck bed.

36. The storage compartment of Claim 31 wherein the enclosure panel is located in the front wall of the truck bed.

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37. The storage compartment of Claim 31 wherein the enclosure panel is located in the Side wall of the truck bed.

38. The storage compartment of Claim 31 wherein the divider panel and the enclosure panel each have three free edges and a fourth edge comprising a hinge means.

39. The storage compartment of Claim 38 wherein the hinge means is a living hinge.

40. The storage compartment of Claim 32 wherein the divider panel securing means comprises at least two protrusions extending outwardly from each Side wall of the bed at a predetermined point in the side walls such that they maintain the divider panel in a 90 angle with respect to the bottom when the divider panel is in a raised position, the protrusions being spaced apart from one another along the horizontal axis a sufficient distance such that the divider panel can be positioned between them.

41. The storage compartment of Claim 33 wherein the enclosure panel securing means comprises at least two horizontal protrusions extending outwardly from each of the two side walls of the bed at a predetermined point in the Side wall, the horizontal protrusions being spaced apart from one another a sufficient distance to form a closure channel to receive and secure the enclosure panel between the horizontal protrusions.

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42. The storage compartment of Claim 31 further comprising a base panel, the base panel having a first side and a second side, the enclosure panel being releasably affixed to the first side of the base panel when the enclosure panel is not within the enclosure securing means.

43. The storage compartment of Claim 31 wherein the enclosure panel is releasably affixed to the first side of the base panel by a hook and loop type of fastener.

44. A truck bed of the type capable of having co-joined members and generally having a front wall, two side walls, a bottom, and a tailgate, the improvement comprising:
a hingedly affixed divider; and
divider securing means,

whereby, the divider can be positioned and secured with the divider securing means to compartmentalize the truck bed.

45. The truck bed of Claim 44 wherein the divider is located in the bottom of the truck bed.

46. The truck bed of Claim 44 wherein the improvement is molded into the truck bed and having three free edges and a fourth edge comprising a hinge means to fix the divider to the bed.

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47. The hinge means of Claim 46 further comprising a living hinge.

48. The truck bed of Claim 44 wherein the divider is cut into the bed after the bed is manufactured.

49. The truck bed of Claim 44 wherein the divider securing means further comprises at least two protrusions extending outwardly from each side wall of the bed at a predetermined point in the side walls such that they maintain the divider in a 90° angle when the divider is in a raised position, said protrusions being spaced apart from one another along the horizontal axis a sufficient distance such that the divider can be positioned between them.

50. The truck bed of Claim 44 further comprising horizontally divided locking means to maintain the divider in a horizontal position when the divider is not in a raised position.

51. The truck bed of Claim 44 wherein the divider is molded into at least one side walls of the bed.

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panel securing means, whereby, the divider panel can be positioned and secured to form a trunk storage compartment.